REMARKS

Claims 1-4, 6-10 and 12-16 are pending in this application. By this Amendment, claims 1-4, 6-10 and 12 are amended. Claims 5 and 11 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. No new matter is added.

Reconsideration of this application is respectfully requested.

Claim 1 is amended to include the features of canceled claim 5, and claim 7 is amended to include the features of canceled claim 11.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration; (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for appeal, should an appeal be necessary. Entry of the amendments is thus respectfully requested.

I. §102(b) Rejection of Claims 1-3, 5, 7-9, 11 and 13-16

Claims 1-3, 5, 7-9, 11 and 13-16 are rejected under 35 U.S.C. §102(b) as unpatentable over U.S. Patent 3,856,034 to Itoh ("Itoh"). This rejection is respectfully traversed.

Independent claim 1 recites a control system for supplying a control signal to a controlled apparatus that includes, among other features, an error generator that produces an error signal from a feedback value relating to a measured operating parameter of a controlled apparatus, and a required value relating to a desired operating parameter value of the controlled apparatus, and a disturbance compensator that receives an input value relating to at least one other parameter value of the controlled apparatus, receives the error signal, produces a compensated error signal based on the input value and the error signal, and provides the compensated error signal to the gain selector.

Support for the above features may be found throughout the original specification and claims. For example, specific support may be found in the original specification at least at page 2, line 21 through page 3, line 8; page 4, lines 15-31; page 5, lines 1-4; page 6, lines 20-23; page 6, lines 4-27; and Fig. 5. Itoh does not teach or suggest such features.

As addressed above, claim 1 is amended to include the features of original claim 5, and claim 5 has been canceled.

The Office Action asserts with respect to claim 5 at page 4, lines 9-16, that Itoh teaches such a disturbance compensator with respect to Fig. 1. Specifically, the Office Action asserts that the described feedback control loop with a cascade compensator configuration is comparable to the claimed disturbance compensator because the described feedback control loop is operable to receive an input value relating to at least one other parameter value of the controlled apparatus, and to receive the error signal, and to produce a compensated error signal based on the input value and the error signal. This is incorrect.

As recited in claim 1 of the present application, the recited control system receives two separate and different values related to the operation of the controlled apparatus: (1) a feedback value relating to a measured operating parameter of a controlled apparatus; and (2) an input value relating to at least one other parameter value of the controlled apparatus.

For example, the error generator produces an error signal from the feedback value relating to a measured operating parameter of a controlled apparatus and a required value relating to a desired operating parameter value of the controlled apparatus. The disturbance compensator produces a compensated error signal based on an input value relating to at least one other parameter value of the controlled apparatus and the error signal produced by the error generator.

In contrast, as described in Itoh at col. 3, lines 8-27, with respect to Fig. 1, the control system in Itoh receives only a single value related to the operation of the controlled apparatus,

i.e., the actual value of the controllable variable X. Itoh make no reference to receiving "an input value relating to at least one other parameter value of the controlled apparatus...," and thus does not teach a disturbance compensator that produces "a compensated error signal based on an input value relating to at least one other parameter value of the controlled apparatus...," as recited in claim 1.

For at least these reasons, Itoh cannot reasonably be considered to teach, or to have suggested, the combination of all of the features positively recited in claim 1. Claim 7 includes features similar to those addressed above with respect to claim 1 and, therefore, Itoh cannot reasonably be considered to teach, or to have suggested, the combination of all of the features positively recited in claim 7, for at least the same reasons addressed above with respect to claim 1. Additionally, claims 2-3, 5, 8-9, 11 and 13-16 depend from one of independent claims 1 and 7, respectively, and, therefore, Itoh cannot reasonably be considered to teach, or to have suggested, the combination of features recited in each of claims 2-3, 5, 8-9, 11 and 13-16, for at least the same reasons addressed above with respect to claim 1 and 7, as well as for the additional features recited in each of claims 2-3, 5, 8-9, 11 and 13-16.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-3, 5, 7-9, 11 and 13-16 under 35 U.S.C. §102(b) as being unpatentable over Itoh are respectfully requested.

II. §103 Rejection of Claims 4 and 10

The Office Action rejects claims 4 and 10 under 35 U.S.C. §103(a) as unpatentable over Itoh in view of U.K. Patent 1,135,508, referred to in the Office Action as "IBM." This rejection is respectfully traversed.

Claims 4 and 10 depend from claims 1 and 7, respectively. IBM fails to overcome the above-described deficiency of Itoh with respect to claims 1 and 7. Therefore, the asserted combination of Itoh and IBM does not teach or suggest the combinations of features recited in claims 1 and 7.

For at least these reasons, it is respectfully submitted that the Itoh/IBM combination cannot reasonably be considered to teach, or to have suggested, the combinations of features in claims 4 and 10 for at least the reasons discussed above with respect to claims 1 and 7, as well as for additional features claims 4 and 10 recite.

Accordingly, reconsideration and withdrawal of the rejection of claims 4 and 10 under 35 U.S.C. §103(a) as being unpatentable over the Itoh/IBM combination are respectfully requested.

III. §103 Rejection of Claims 6 and 12

The Office Action rejects claims 6 and 12 under 35 U.S.C. §103(a) as unpatentable over Itoh in view of U.S. Patent 4,439,868 to Brown ("Brown"). This rejection is respectfully traversed.

Claims 6 and 12 depend from claims 1 and 7, respectively. Brown fails to overcome the above-described deficiency of Itoh with respect to claims 1 and 7. Therefore, the asserted combination of Itoh and Brown does not teach or suggest the combinations of features recited in claims 1 and 7.

For at least these reasons, it is respectfully submitted that the Itoh/Brown combination cannot reasonably be considered to teach, or to have suggested, the combinations of features in claims 6 and 12 for at least the reasons discussed above with respect to claims 1 and 7, as well as for additional features claims 6 and 12 recite.

Accordingly, reconsideration and withdrawal of the rejection of claims 6 and 12 under 35 U.S.C. §103(a) as being unpatentable over the Itoh/Brown combination are respectfully requested.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff

Registration No. 27,075

J. Adam Neff

Registration No. 41,218

JAO:JMH

Date: November 7, 2006

OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461